

Non-Overlapping Antenna Pattern Diversity In Wireless Network Environments

Abstract of the Disclosure

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Methods, apparatuses and systems directed to a wireless network interface supporting directional antenna diversity. Directional diversity, in one embodiment, makes use of antennas with higher gain and non-overlapping patterns to provide communication over a greater area and select the best antenna
10 to receive signals transmitting wireless frames or packets. Certain embodiments optimize wireless network systems using Orthogonal Frequency Division Multiplexed (OFDM) signals where spatial diversity protection provided by spatially-separated, omni-directional antennas is not required. In other embodiments, use and selection of directional antennas allows for sectorization
15 resulting in performance gains such as extended coverage areas, noise reduction, enhanced efficiency, and increased throughput.